| Index | of Claims |
|-------|-----------|
|       |           |

10/647,075

Examiner

Junghwa M. Im

Applicant(s)/Patent under Reexamination

AOYAGI, AKIYOSHI

Art Unit

2811

| <b>√</b> | Rejected |
|----------|----------|
|          | Allowed  |

| _ | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| Z | Non-Elected  |
|---|--------------|
| _ | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

| Cla      | aim      | Date   |          |          |              |  | CI           | Claim Date                                 |  |                 |          |          |          |                 |          | 1        | Claim Date |     |     |        |   |                        |            |                   |          |          |          |          |          |          |          |          |
|----------|----------|--|----------|----------|--------------|--|--------------|--|--|-----------------|----------|----------|----------|-----------------|----------|----------|------------|-----|-----|--------|---|------------------------|------------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| <u> </u> |          |  |          |          |              |  |              | <u>                                   </u> |  |                 |          |          |          |                 |          | 1        | الله الله  |     | Т   | T      | Т | Ť                      | Ť          | _                 | т        | T        | $\dashv$ |          |          |          |          |          |
| Final    | Original | 2/15/05  |          |          |              |  |              |  |  |                 | Final    | Original |          |                 |          |          |            |     |     |        |   | Final                  | Original   |                   |          |          |          |          |          |          |          |          |
| 1        | 1        | =  |          |          | _            | _  | L            | L  | _  | $\dashv$        |          | 51       |          |                 | $\dashv$ | $\dashv$ | $\dashv$   | _   | 4   | 4      |   |                        |            | 4                 | _        | _        | _        | _        |          | $\dashv$ | $\dashv$ | 4        |
|          | 2        | =  |          | _        |              | ⊢  | ⊢            | ├  |  | $\dashv$        |          | 52       | $\vdash$ | $\vdash$        | -        | $\dashv$ | $\dashv$   |     | +   | ┵      | ┨ |                        | 101        |                   | +        | $\dashv$ | -        | $\dashv$ |          | $\dashv$ | $\dashv$ | $\dashv$ |
| 2        |          | _  | _        | _        | -            | ⊢  | ├            | ⊢  | ⊢  | Н               | -        |          |          | -1              | $\dashv$ | -        | $\dashv$   | +   | +   | +      | ł |                        | 102        | $\dashv$          | -        |          | -        | $\dashv$ |          | $\dashv$ | $\dashv$ | -        |
| 3        | 3        | =  |          | _        | -            | <b> </b>   | -            | ├-   | -  | $\vdash$        |          | 53<br>54 | $\vdash$ | $\vdash$        | $\dashv$ | -        | -+         | -   | +   |        | ł |                        | 103        | -                 | +        | $\dashv$ | -        |          |          | -        | $\dashv$ | $\dashv$ |
| 4        |          | =  | $\vdash$ | _        | <u> </u>     | $\vdash$   | ⊢            | ⊢  | <b>-</b>   | Н               |          |          | -        | -               |          | $\dashv$ | +          |     | +   | +-     | ┨ | <u> </u>               | 104        |                   | -+       | -        | -        | $\dashv$ |          | $\dashv$ | $\dashv$ | 4        |
| _        | 5        | <u> </u>   | -        | _        |              | _  | <u> </u>     | ⊢  | <u> </u>   | Н               |          | 55       | -        |                 |          | $\dashv$ | -          | -   | - - |        | ł |                        | 105        |                   | }        | -        | -        | -        |          | $\dashv$ | $\dashv$ | 4        |
| 5        | 6        | =  |          | _        | <u> </u>     | <u> </u>   | <u> </u>     | ⊢  | <u> </u>   | $\dashv$        | <u> </u> | 56       | -        | $\vdash$        |          | -        | -          |     | +   | -      | ł |                        | 106        |                   | +        | -        | -        | -        | _        | -        | $\dashv$ | $\dashv$ |
| 6        | 7        | =  |          |          | -            | H  | H            | ├  | H  | Н               | . —      | 57       |          | $\dashv$        | $\dashv$ | $\dashv$ | -+         |     | +   | ┿      | ł |                        | 107        | -                 | +        |          | -        | $\dashv$ |          | $\dashv$ | $\dashv$ | -        |
| 7        | 8        | =  |          |          | -            | -  | <u> </u>     | ┝  | H  | Н               | <u> </u> | 58       |          | $\vdash$        | $\dashv$ | $\dashv$ | $\dashv$   | -   | +   | -      | 4 |                        | 108        |                   | +        | $\dashv$ |          |          |          | -        | $\dashv$ | -        |
|          | 9        | $\vdash$   | _        | _        | -            | <del> </del>                                     | $\vdash$     | ⊢  | H  | $\dashv$        | -        | 59       | $\vdash$ | $\vdash$        | $\dashv$ | $\dashv$ | $\dashv$   | +   | +   | +      | ł |                        | 109        | $\dashv$          | $\dashv$ | $\dashv$ | -        | -        |          | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 10       | -  |          |          | $\vdash$     | <u> </u>   | -            | -  | H  | -               | $\vdash$ | 60       | $\vdash$ | $\vdash$        | $\dashv$ | $\dashv$ | $\dashv$   | +   | +   | +      | ł | $\vdash$               | 110        | $\dashv$          | $\dashv$ | -        | $\dashv$ | $\dashv$ |          | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 11       | -  | -        | _        | $\vdash$     | <del> </del>                                     | <del> </del> | ├  | ⊢  | $\dashv$        | -        | 61       | -        | $\vdash \vdash$ |          | -        | $\dashv$   | +   | +   |        | { | $\vdash \vdash$        | 111        | $\dashv$          | $\dashv$ | -        | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 13       | <del>                                     </del> | $\vdash$ |          | -            |  | $\vdash$     | $\vdash$                                   | -  | $\vdash$        | -        | 62<br>63 | $\vdash$ | $\vdash$        | $\dashv$ | $\dashv$ | $\dashv$   | -+- | +   | +      | { | $\vdash$               | 112<br>113 | $\dashv$          | +        | -        |          | -        |          |          | $\dashv$ | $\dashv$ |
|          |          | -  | _        | _        |              | ├  | ⊢            | -  |  | $\dashv$        |          |          | -        | $\vdash$        |          |          |            | +   | +   | $+\!-$ | 1 | $\vdash \vdash$        |            | $\dashv$          | $\dashv$ | -        | ᅱ        | $\dashv$ |          | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 14<br>15 | $\vdash$   | $\vdash$ | _        | ⊢            | <del>                                     </del> | $\vdash$     | $\vdash$                                   | -  | $\dashv$        | -        | 64<br>65 | $\vdash$ | $\vdash \vdash$ |          | $\dashv$ | $\dashv$   | +   | +   | +      | { | $\vdash\vdash$         | 114<br>115 | $\dashv$          | $\dashv$ | -        | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
|          |          | $\vdash$   | $\vdash$ | $\vdash$ | $\vdash$     | -  | $\vdash$     | $\vdash$                                   | 1—   | $\vdash$        | -        |          | ╀┤       | $\vdash \vdash$ |          | $\dashv$ | $\dashv$   | +   | +   | +      | ┨ | $\vdash$               |            | $\vdash \vdash$   | +        | $\dashv$ | -        |          | $\vdash$ |          | $\dashv$ | $\dashv$ |
|          | 16<br>17 |  | _        | _        | ├-           | -  | $\vdash$     | $\vdash$                                   | ├  | $\dashv$        | -        | 66<br>67 | $\vdash$ | -               |          | -        | -          | +   | ╬   | -      | ł | $\vdash\vdash$         | 116<br>117 | $\vdash$          |          |          | ᅱ        | $\dashv$ |          | -        | -        | {        |
| <u> </u> |          | -  | _        |          |              |  | ┝            | -  | -  |                 | -        |          | -        | $\vdash$        |          |          | $\dashv$   |     |     | +-     | ┨ |                        |            | $\rightarrow$     | $\dashv$ | -        | $\dashv$ | -        | $\dashv$ | -        | $\dashv$ | ᅴ        |
| <b></b>  | 18       | -  |          |          |              |  | -            | <u> </u>                                   | -  | $\vdash$        | -        | 68       | -        | Н               | -        | _        | +          | _   | +   | -}     | - | $\vdash$               | 118        | $\vdash$          | $\dashv$ | -        |          | _        | -        |          | $\dashv$ | 4        |
|          | 19       | <u> </u>   |          |          | <u> </u>     | -  | ⊢            | -  | ├  | _               | -        | 69       | -        | Н               |          |          | -          | -   |     |        | - |                        | 119        | $\dashv$          | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\vdash$ | $\dashv$ | $\dashv$ | -        |
|          | 20       | <u> </u>   |          | _        | <u> </u>     |  | ⊢            | -  | <u> </u>   | _               |          | 70       | ╁        | $\vdash$        | $\dashv$ | +        | +          | +   | +   | ┿      | 1 |                        | 120        | $\dashv$          | -        |          |          |          | $\vdash$ | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 21       | <u> </u>   |          | $\vdash$ | <del> </del> |  | ⊢            | ┝  | _  | _               |          | 71       |          |                 |          |          | -          |     | +-  |        | ┨ |                        | 121        | $\dashv$          | $\dashv$ | -        | $\dashv$ | $\dashv$ |          | -        | $\dashv$ | $\dashv$ |
|          | 22       | _  | _        | _        | _            | -  | ⊢            | -  | -  | _               | -        | 72       | -        | $\vdash$        | -        | -        | +          | +   |     |        | ┨ | -                      | 122        |                   |          | -        |          | -        |          |          | $\dashv$ | $\dashv$ |
| <u> </u> | 23       | $\vdash$   |          |          | _            | -  |              | <u> </u>                                   | ├  | _               |          | 73       | $\vdash$ | $\vdash$        | $\dashv$ | $\dashv$ |            |     | +   | +      | 1 |                        | 123        | $\vdash$          | $\dashv$ | $\dashv$ | $\dashv$ | -        | -        | -        | $\dashv$ | $\dashv$ |
| -        | 24       | _  | _        | _        | ┞            | _  | ⊢            | <del> </del>                               | <del>                                     </del> | _               | <u> </u> | 74       | -        | -               |          |          |            | +   | +   |        | - |                        | 124        | $\vdash$          | $\dashv$ | -        | $\dashv$ | -        | $\vdash$ |          | -        | 긕        |
|          | 25       | _  |          | _        | -            |  | ├            | ┡  | ├  |                 | -        | 75       | -        | $\vdash$        |          | $\dashv$ | +          | -   | +   | -}-    | 1 |                        | 125        | $\vdash$          | $\dashv$ | -        | $\dashv$ | _        | -        | _        | -        |          |
|          | 26       | H  |          |          | H            | _  | ⊢            | ├  | -  | _               | -        | 76       | -        | $\vdash$        | -        | $\dashv$ | -          |     | +   | -      | - |                        | 126        | $\vdash$          | 4        |          | $\dashv$ | $\dashv$ | -        | -        | $\dashv$ | ᅱ        |
|          | 27       | ⊢  |          | _        | ├            | -  | ⊢            | ├-   |  | $\dashv$        |          | 77<br>78 | -        | $\vdash$        | $\dashv$ | -        | -          | +   | +   |        | - | $\vdash$               | 127        | -                 | -        | -        |          | -        | $\dashv$ | -        | $\dashv$ | $\dashv$ |
|          | 28<br>29 | $\vdash$   |          |          | ⊢            | $\vdash$   | ⊢            | ├  | ⊢  | Н               | -        | 79       | $\vdash$ | ${oxdot}$       | $\dashv$ | $\dashv$ | $\dashv$   | +   | +   | +      | ┨ | $\vdash$               | 128        | $\vdash$          | $\dashv$ | $\dashv$ | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
|          |          | -  | _        | _        | -            | _  | ┢            | ┝  | -  |                 |          |          | -        |                 |          | -        |            | +   |     |        | - | -                      | 129        | -                 | -        | $\dashv$ | -        | -        | -1       |          | -        | -4       |
|          | 30       | $\vdash$   | _        |          | -            | -  |              | -  | ├  | Н               | <u> </u> | 80       | -        |                 | ᅱ        |          | -          |     | +   |        | ┨ | $\vdash$               | 130        | $\dashv$          | $\dashv$ | -        | ᅱ        | -        | -1       | -        | $\dashv$ | ᅴ        |
|          | 31       | $\vdash$   | $\vdash$ | H        | $\vdash$     | $\vdash$   | ⊢            | $\vdash$                                   | $\vdash$   | Н               | <u> </u> | 81       | $\vdash$ | $\vdash \vdash$ |          | $\dashv$ | $\dashv$   | +   | +   | +      | { | <b> </b>               | 131        | $\vdash$          | +        | -        | -        |          | $\dashv$ | -        | $\dashv$ | $\dashv$ |
|          | 32       | -  | _        | <u> </u> | <u> </u>     | <del> </del> —                                   | ⊢            | ⊢  | ⊢  | $\dashv$        |          | 82       | $\vdash$ | $\vdash$        | -        |          | -          | +   | +   |        | { | $\vdash\vdash$         | 132        | $\dashv$          | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
| -        | 33       | $\vdash$   |          |          |              | <del> </del>                                     | -            | -  | $\vdash$   | $\vdash \vdash$ | -        | 83       | $\vdash$ | $\vdash$        | $\dashv$ | $\dashv$ |            |     | +   |        | ł | $\vdash$               | 133        | $\vdash$          | +        | 4        |          | $\dashv$ | $\dashv$ | -        | $\dashv$ | $\dashv$ |
| -        |          | $\vdash$   | $\vdash$ | Η,       | _            | $\vdash$   | $\vdash$     | $\vdash$                                   | $\vdash$   | $\dashv$        | $\vdash$ | 84<br>85 | +        | $\vdash \vdash$ |          | $\dashv$ | $\dashv$   | +   | +   | +      | ł | <del></del>            | 134<br>135 | $\vdash$          |          | -        |          | -        |          | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 35       |  | $\vdash$ |          | ├            | ⊢  | ├            | <del> </del>                               | $\vdash$   | $\dashv$        | -        |          | $\vdash$ | $\vdash \vdash$ |          | $\dashv$ | $\dashv$   | +   | +   |        | 1 | $\vdash$               |            | $\dashv$          | +        | $\dashv$ | -        | -        | -        | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 36       | -  | Н        | -        | -            | $\vdash$   | $\vdash$     | -  |  | $\dashv$        | -        | 86<br>87 | $\vdash$ | $\vdash$        | -        | -+       | $\dashv$   | +   | +   | +      | { | $\vdash \vdash$        | 136        | $\vdash$          | +        | $\dashv$ |          | $\dashv$ | $\vdash$ | -        | $\dashv$ | $\dashv$ |
|          | 37       | $\vdash$   | $\vdash$ | $\vdash$ | $\vdash$     |  | $\vdash$     |  | $\vdash$   | $\dashv$        | -        |          | $\vdash$ | $\vdash$        |          | $\dashv$ |            | +   | +   | +      | 1 | <b> </b>               | 137        | $\vdash$          | $\dashv$ | 4        | -        | $\dashv$ |          | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 38<br>39 |  | $\vdash$ | -        | -            | -  | <del> </del> | <del> </del>                               | $\vdash$   | $\dashv$        | -        | 88       | $\vdash$ | $\vdash$        |          | -        | +          | +   | +   | +      | ł | $\vdash \vdash \vdash$ | 138        | -                 | $\dashv$ | +        | -        | _        |          | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 40       | $\vdash$   |          | -        | -            | -  | ├            |  | -  | $\dashv$        | <u> </u> | 89<br>90 | Н        | $\vdash$        | $\dashv$ | -+       | +          | +   | +   | +      | 1 |                        | 139<br>140 | $\dashv$          | +        |          |          | $\dashv$ |          | $\dashv$ | $\dashv$ | $\dashv$ |
|          |          | $\vdash$   | $\vdash$ | $\vdash$ | $\vdash$     | $\vdash$   | $\vdash$     | $\vdash$                                   | $\vdash$   | $\dashv$        | <u> </u> | 91       | $\vdash$ | $\vdash$        |          | $\dashv$ |            |     | +   | +      | 1 | <u> </u>               |            | $\dashv$          | $\dashv$ | 4        |          | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 41       | ┝┈   | $\vdash$ | $\vdash$ | $\vdash$     | H  | $\vdash$     | $\vdash$                                   | -  | $\dashv$        | -        | 92       | Н        | $\vdash \vdash$ |          | $\dashv$ | +          | +   | +   | +-     | 1 |                        | 141<br>142 | $\dashv$          | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |          | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 43       | Н  | $\dashv$ |          | $\vdash$     | $\vdash$   | $\vdash$     | H  | $\vdash$   | $\dashv$        |          | 93       | $\vdash$ | $\vdash$        | $\dashv$ | +        | $\dashv$   | +   | +   | +-     | ł |                        | 143        | -                 | $\dashv$ | $\dashv$ | -        |          |          | -+       | $\dashv$ | $\dashv$ |
|          | 43       | $\vdash$   | $\dashv$ | $\vdash$ | $\vdash$     | $\vdash$   | $\vdash$     | H  | -  | $\dashv$        |          | 94       | $\vdash$ | $\vdash$        | $\dashv$ | $\dashv$ | $\dashv$   | +   | +   | +      | 1 |                        | 144        | $\dashv$          | +        | $\dashv$ | -        | -        |          | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 45       | $\vdash$   | $\dashv$ | H        | $\vdash$     | $\vdash$   | $\vdash$     | $\vdash$                                   | $\vdash$   | $\dashv$        | -        | 95       | $\vdash$ | $\dashv$        |          | $\dashv$ | -+         | +   | +   | +-     | 1 |                        | 144        | $\dashv$          | $\dashv$ | ᅥ        | -        | $\dashv$ | -        | -+       | $\dashv$ | $\dashv$ |
|          | 45       | $\vdash$   | $\vdash$ | H        | $\vdash$     | $\vdash$   | $\vdash$     | $\vdash$                                   | ┝╌   | $\dashv$        |          | 96       | $\vdash$ | $\vdash$        |          | $\dashv$ | -+         | +   | +   | +      | ł |                        | 145        | $\dashv$          | +        | +        | $\dashv$ | $\dashv$ | $\vdash$ | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 47       | Н  | $\dashv$ | $\vdash$ | $\vdash$     | $\vdash$   | -            | ╁┈   | $\vdash$   | $\dashv$        | <u> </u> | 97       | $\vdash$ | $\dashv$        |          | $\dashv$ | ┰          | ┿   | +   | +      | 1 |                        | 147        | -                 | +        | +        | -        | $\dashv$ | $\dashv$ | -        | +        | $\dashv$ |
|          | 47       | $\vdash$   | -        | $\vdash$ | -            |  | <del> </del> | <del> </del>                               | -  | $\dashv$        |          | 98       | $\vdash$ | $\dashv$        | $\dashv$ | $\dashv$ | $\dashv$   | +   | ╀   | ╁      | ł | $\vdash$               | 148        | $\dashv$          | $\dashv$ | $\dashv$ | -        | $\dashv$ |          | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 49       | Н  | $\vdash$ | H        | $\vdash$     | $\vdash$   | $\vdash$     | $\vdash$                                   | $\vdash$   | $\dashv$        |          | 99       | $\vdash$ | $\dashv$        | $\dashv$ | $\dashv$ | $\dashv$   | +   | +   | +      | ł |                        |            | $\dashv$          | +        | +        | -        | $\dashv$ | -        | -+       | +        | $\dashv$ |
|          | 50       | $\vdash$   | $\vdash$ | $\vdash$ | $\vdash$     | $\vdash$   | $\vdash$     | $\vdash$                                   | $\vdash$   | $\dashv$        | -        | 100      | $\vdash$ | $\dashv$        | $\dashv$ | $\dashv$ | -+         | +   | +   | +      | ł | $\vdash$               | 149<br>150 | $\dashv$          | +        | $\dashv$ | $\dashv$ | $\dashv$ | -        | $\dashv$ | +        | $\dashv$ |
|          | ου       |  |          |          |              |  |              |  |  |                 | L        | 1100     |          | ш               |          |          |            | L_  |     |        | J |                        | 150        | $oldsymbol{\bot}$ |          |          |          |          |          |          |          |          |